COMPLETE LISTING OF ALL CLAIMS

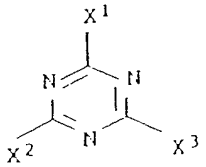
1-11. (canceled)

12. (currently amended) A method of thermally or acoustically insulating a building, said method comprising installing a mat-form insulating material in the building, wherein the insulating material comprises at least one modified melamine resin fiber, which is obtained by condensing a melamine containing mixture with formaldehyde or a formaldehyde-supplying compound in a molar ratio of melamine to formaldehyde within the range from 1:1.15 to 1:4.5, said melamine mixture comprising

(A) from 90 to 99.9 mol% of a mixture comprising

(a) from 30 to 99.9 mol% of melamine and

(b) from 1.0 to 70 mol% of a substituted melamine of the general formula I



(I)

where X^1, X^2 and X^3 are each selected from $-NH_2$, $-NHR^1$ and $-NR^1R^2$, subject to the proviso that X^1, X^2 and X^3 are not all $-NH_2$, and R^1 and R^2 are independently selected from hydroxy-C_2-C_{20}-alkyl, hydroxy-C_2-C_4-alkyl-(oxa-C_2-C_4-alkyl)$_n$, where n is 1 to 5, and amino-C_2-C_{12}-alkyl, or mixtures of melamines of formula I, and

(B) from 0.1 to 10 mol%, based on (A) and (B), of a compound selected from phenols which are unsubstituted or substituted by radicals selected from C_1-C_9-alkyl and hydroxyl, C_1-C_4-alkanes substituted by two or three phenol groups, di(hydroxyphenyl) sulfones or mixtures thereof,

wherein the insulating material has a density of from 10 to 150 gl^{-1} and

wherein the thickness of the mat-form insulating material is from 20 to 200 mm.

13. (previously presented) The method of claim 12, wherein the insulating material further comprises at least one polyalkylene terephthalate fiber.

14. (previously presented) The method of claim 13, wherein the mat-form insulating material comprises

a) from 5 to 95 % by weight of the melamine resin fiber, and

b) from 5 to 95 % by weight of the polyalkylene terephthalate fiber.

15. (previously presented) The method of claim 14, wherein the mat-form insulating material further comprises

c) up to 30% by weight of further fibers and/or

d) up to 20% by weight of additives.

16. (previously presented) The method of claim 14, wherein the polyalkylene terephthalate fiber is selected from polyethylene terephthalate fibers, polybutylene terephthalate fibers or mixtures thereof.

17. (previously presented) The method of claim 16, wherein the polyethylene terephthalate fibers are bicomponent fibers having a core/sheath construction comprising a polyester core and a copolyester sheath.

18. (canceled)

19. (previously presented) The method of claim 17, wherein the individual fiber linear density of the bicomponent fibers is within the range of from 1 to 20 dtex.

20. (previously presented) The method of claim 14, further comprising producing the mat-form insulating material by

mixing the melamine resin fiber and the polyalkylene terephthalate fiber to form a

mixture,

laying down the mixture to form a mat, and

heating the mat.

21. (previously presented) The method of claim 20, wherein the polyalkylene fiber is a bicomponent fiber having a core/sheath construction comprising a polyester core and a copolyester sheath and wherein the temperature of the heating is higher than the melting temperature of the sheath and lower than the melting temperature of the core.

22. (previously presented) The method of claim 18, wherein the melting temperature of the core of the bicomponent fibers is within the range of from 230 to 280°C.

23. (previously presented) The method of claim 18, wherein the melting temperature of the sheath of the bicomponent fibers is within the range of from 100 to 130°C.

24. (previously presented) The method of claim 17, wherein the individual fiber linear density of the bicomponent fibers is within the range of from 2 to 15 dtex.

25. (previously presented) The method of claim 12, wherein the insulating material has a density of from 15 to 50 gl^{-1}.

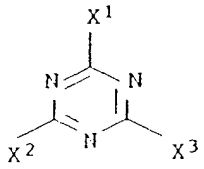
26. (previously presented) A mat-form insulating material comprising:

i) from 5 to 95% by weight of melamine resin fibers, which are obtained by condensing a melamine-containing mixture with formaldehyde or formaldehyde-supplying compounds in a molar ratio of melamines to formaldehyde within the range of 1:1.15 to 1:4.5, said melamine-containing mixture comprising

(A) from 90 to 99.9 mol% of a mixture comprising

(a) from 30 to 99.9 mol% of melamine and

(b) from 1.0 to 70 mol% of a substituted melamine of the formula I



(I)

where X^1, X^2 and X^3 are each selected from $-NH_2$, $-NHR^1$ and $-NR^1R^2$, subject to the proviso that X^1, X^2 and X^3 are not all $-NH_2$, and R^1 and R^2 are independently selected from hydroxy-C_2-C_{20}-alkyl, hydroxy-C_2-C_4-alkyl-(oxa-C_2-C_4-alkyl)$_n$, where n is 1 to 5, and amino-C_2-C_{12}-alkyl, or mixtures of melamines of formula I, and

(B) from 0.1 to 10 mol%, based on (A) and (B), of a compound selected from phenols which are unsubstituted or substituted by radicals selected from C_1-C_9-alkyl and hydroxyl, C_1-C_4-alkanes substituted by two or three phenol groups, di(hydroxyphenyl) sulfones or mixtures thereof,

ii) from 5-95% by weight of polyalkylene terepthalate fibers,

iii) an amount, up to 30% by weight, of polyacrylonitrile fibers, and optionally

iii) up to 20% by weight of additive.

27. (new) A method of thermally or acoustically insulating a building, said method comprising installing a mat-form insulating material in the building,

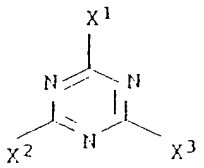
wherein the insulating material comprises from 5 to 95 % by weight of at least one modified melamine resin fiber and from 5 to 95% by weight of a polyalkylene terephthalate fiber,

wherein said melamine fiber is obtained by condensing a melamine containing mixture with formaldehyde or a formaldehyde-supplying compound in a molar ratio of melamine to formaldehyde within the range from 1:1.15 to 1:4.5, said melamine mixture comprising

(A) from 90 to 99.9 mol% of a mixture comprising

(a) from 30 to 99.9 mol% of melamine and

(b) from 1.0 to 70 mol% of a substituted melamine of the general formula I



(I)

where X^1, X^2 and X^3 are each selected from $-NH_2$, $-NHR^1$ and $-NR^1R^2$, subject to the proviso that X^1, X^2 and X^3 are not all $-NH_2$, and R^1 and R^2 are independently selected from hydroxy-C_2-C_{20}-alkyl, hydroxy-C_2-C_4-alkyl-(oxa-C_2-C_4-alkyl)$_n$, where n is 1 to 5, and amino-C_2-C_{12}-alkyl, or mixtures of melamines of formula I, and

(B) from 0.1 to 10 mol%, based on (A) and (B), of a compound selected from phenols which are unsubstituted or substituted by radicals selected from C_1-C_9-alkyl and hydroxyl, C_1-C_4-alkanes substituted by two or three phenol groups, di(hydroxyphenyl) sulfones or mixtures thereof,

wherein the insulating material has a density of from 10 to 150 gl^{-1},

wherein the thickness of the mat-form insulating material is from 20 to 200 mm,

wherein the polyalkylene terephthalate fiber is selected from a polyethylene terephthalate fiber, a polybutylene terephthalate fiber or a mixture thereof,

wherein the polyalkylene terephthalate fiber is a bicomponent fiber having a

core/sheath construction comprising a polyester core and a copolyester sheath, and

wherein the melting temperature of the core of the bicomponent fiber is within the range from 200 to 300°C, and the melting temperature of the sheath is within the range of from 80 to 150°C.

28. (new) The method of claim 12, wherein the mat-form insulating material has a DIN 52 612 thermal conductivity of not more than 0.045 $W\ m^{-1}\ K^{-1}$.

29. (new) The method of claim 12, wherein the mat-form insulating material has a DIN 52 215-83 sound adsorption, converted from perpendicular to stationary sound incidence, of not less than 92%.